

Remarks

Applicants thank the Examiner for withdrawal of the rejections under 35 U.S.C. § 102(e) and 35 U.S.C. § 112, first paragraph. Reconsideration of this Application is respectfully requested. Upon entry of the foregoing amendment, claims 1, 2, and 25, are pending in the application, with claim 1 as the independent claim.

Claim 1 has been amended. Support for the amendment of claim 1 is found throughout the specification and originally filed claims, specifically at claim 9. These changes are believed to introduce no new matter, and their entry is respectfully requested.

In addition, claims 3, 4, 7, 8, 10-24, and 26-36, which are drawn to non-elected inventions have been cancelled. Based on the above amendment and the following remarks, Applicants respectfully request that the Office reconsider all outstanding rejections and that they be withdrawn.

35 U.S.C. § 112, second paragraph

Claim 10 stand rejected under 35 U.S.C. § 112, second paragraph as allegedly being "incomplete for omitting essential elements, such omission amounting to a gap between the elements." (*Office Action*, page 3). In the interest of expediting prosecution, claim 10 has been cancelled, rendering this rejection moot. Accordingly, Applicants respectfully request that the preceding rejection be withdrawn.

35 U.S.C. § 103(a)

The rejection of claims 1, 2, 10, and 25, as allegedly being obvious over U.S. Pat. No. 6,989,140 B2 ("Tidmarsh") in view of Kozyrev *et al.*, *Tetrahedron Letters* (1996),

37, 6431-34 ("Kozyrev") is respectfully traversed. (*Office Action*, page 3). Specifically, the Office is of the opinion,

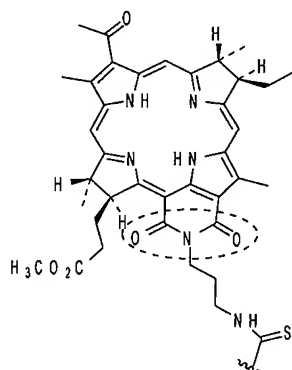
[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare glucose conjugates with bacteriopurpurins, including those represented by 2 and 3 in the Koyzrev reference. Tidmarsh et al. teach that glucose conjugates with fluorophores are useful for cancer detection and Koyrev et al. teach that bacteriopurpurins 2 and 3 have identical properties for photodynamic therapy. . . . Thus [sic] the skilled artisan could easily conceive of preparing a glucose conjugate would be effective for cancer detection and photodynamic therapy.

(*Office Action*, page 5).

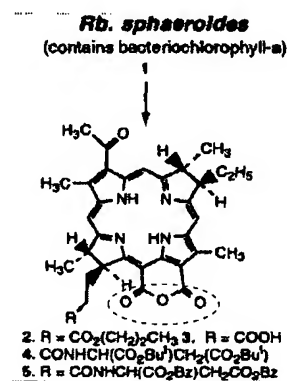
The basis of the Office's rejection of claims 1, 2, 10, and 25, under 35 U.S.C. § 103(a) appears to be "(A) Combining prior art elements according to known methods to yield predictable results," known as Rationale A. *Manual of Patent Examining Procedure*, 8th edition, revision 6, 2100-128 (August 2007)("MPEP"). To establish a *prima facie* case of obviousness under Rationale A, the Office must show that "the prior art included *each* element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference." *Id.* at 129 (emphasis added).

The references cited by the Office—Tidmarsh, Kozyrev, and Chen *et al.*, *J. Med. Chem.*, 45: 255-258 (2002) ("Chen")—do not include all the elements of the claimed invention. First, by the Office's own admission, Tidmarsh does not teach all the elements of the claimed invention. (*Office Action*, page 4). Second, Koyrev does not teach any element of the claimed invention. For example, Kozyrev does not teach the claimed D group, BChlPP (bacteriopurpurin). Notably, the structures disclosed in Koyrev do not

encompass the claimed BChlPP moiety. As illustrated below, the BChlPP as encompassed by the claimed has an imide functional group $-(C=O)-N-(C=O)-$ while the Koyrev structures cited each has an acid anhydride group $-(C=O)-O-(C=O)-$. (*Office Action*, page 6).

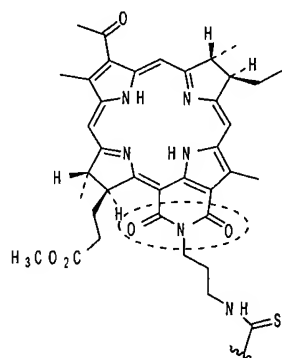


BChlPP

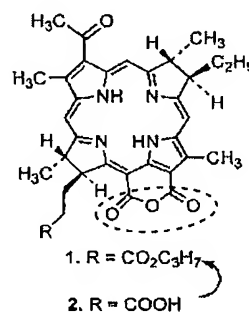


Compounds 2-5 (Koyrev)

Finally, Chen does not teach any elements of the claimed invention. Specifically, Chen neither teaches the claimed glucose conjugate nor the claimed BChlPP. In fact, as illustrated below, the compound 1 (bacteriopurpurin-18) described in Chen is structurally different from the claimed BChlPP.



BChlPP



Compound 1 (bacteriopurpurin-18) (Chen)

Therefore, it would not have been obvious to one of skilled in the art at the time the invention was made to prepare the claimed conjugates based on the teachings of Tidmarsh, Koyrev and Chen.

Notwithstanding, in the interest of expediting prosecution, Applicants have amended claim 1 by replacing the term "bacteriopurpurin-18" with the structure of BChlPP in order to clarify the invention.

Based on the foregoing, Applicants respectfully request that the preceding rejection be withdrawn.

Miscellaneous

The Examiner has indicated that a complete reply to the final rejection must include cancellation of non-elected claims or other appropriate action, *i.e.*, petition from requirement for restriction (37 C.F.R. § 1.144). Accordingly, non-elected claims 3, 4, 7, 8, 11-24, and 26-36, have been cancelled.

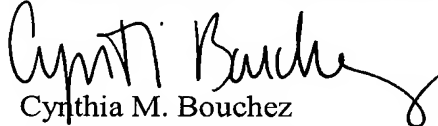
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Office reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Office believes, for any reason, that personal communication will expedite prosecution of this application, the Office is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "Cynthia M. Bouchez", with a stylized flourish at the end.

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